



# RAILROAD COMMISSION OF TEXAS

## OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 06-0265207

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THE APPLICATION OF VALENCE OPERATING COMPANY TO CONSOLIDATE THE BECKVILLE, NORTH (COTTON VALLEY), BECKVILLE, WEST (COTTON VALLEY) AND DARCO S.E. COTTON VALLEY FIELDS INTO THE BECKVILLE (COTTON VALLEY) FIELD AND TO AMEND FIELD RULE NOS. 2 AND 3 FOR THE BECKVILLE (COTTON VALLEY) FIELD, HARRISON, PANOLA AND RUSK COUNTIES, TEXAS

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HEARD BY: Richard D. Atkins, P.E.

DATE OF HEARING: June 14, 2010

**APPEARANCES:**

**REPRESENTING:**

**APPLICANT:**

Rick Johnston

Valence Operating Company

**OTHER INTERESTED PARTY:**

George C. Neale

Tanos Exploration, LLC

**EXAMINER'S REPORT AND RECOMMENDATION**  
**STATEMENT OF THE CASE**

This is the unopposed application of Valence Operating Company ("Valence") to consider consolidation of the Beckville, North (Cotton Valley), ID No. 06650 500, Beckville, West (Cotton Valley), ID No. 06653 400, and Darco S.E. Cotton Valley, ID No. 23100 300, Fields into the Beckville (Cotton Valley), ID No. 06648 500, Field. Field Rules for the Beckville (Cotton Valley) Field were adopted in Final Order No. 06-025075, effective August 14, 2007. The rules in effect for the field are summarized as follows:

1. Designated interval from 8,850 to 10,300 feet as shown on the log of the Ben Brooks Lease, Well No. 1D;
2. 330'-660' well spacing with no between-well spacing limitation for vertical to horizontal wells;
3. 40 acre gas units with optional 20 acre density;

4. Allocation based on 25% per well and 75% deliverability.

Valence requests that Field Rule Nos. 2 and 3 be amended to provide for take points and off lease penetration points for horizontal wells and 640 acre gas units with optional 20 acre density. Valence also requests that the allocation formula remain suspended. The examiner recommends approval of the field consolidation and the amended Field Rule Nos. 2 and 3.

### **DISCUSSION OF THE EVIDENCE**

The Beckville, North (Cotton Valley) Field was discovered in June 1977 at a depth of 9,200 feet. The field is a non-associated gas field with 22 producing wells carried on the proration schedule. Field Rules provide for 467'-933' well spacing with take points and off lease penetration points in horizontal wells, 640 acre gas units with optional 40 acre density and allocation based on 25% acres and 75% deliverability. The allocation formula for this field is currently suspended. Cumulative production from the field is 20.8 BCFG and 382.8 MBC.

The Beckville, West (Cotton Valley) Field was discovered in May 1976 at a depth of 10,000 feet. The field is a non-associated gas field with 51 producing wells carried on the proration schedule. Field Rules provide for 467'-1,200' well spacing, 640 acre gas units with optional 40 acre density and allocation based on 100% acres. The allocation formula for this field is currently suspended. Cumulative production from the field is 56.8 BCFG and 382.8 MBC.

The Darco S.E. Cotton Valley Field was discovered in June 1979 at a depth of 10,100 feet. The field is a non-associated gas field with 64 producing wells carried on the proration schedule. Field Rules provide for 467'-933' well spacing, 640 acre gas units with optional 40 acre density and allocation based on 100% acres. The allocation formula for this field is currently suspended. Cumulative production from the field is 20.4 BCFG and 127.4 MBC.

The Beckville (Cotton Valley) Field was discovered in July 1974 at a depth of 9,300 feet. The field is a non-associated gas field with 267 producing wells carried on the proration schedule. Field Rules provide for 330'-660' well spacing with no limitation between horizontal and vertical wells, 40 acre gas units with optional 20 acre density and allocation based on 25% per well and 75% deliverability. The allocation formula for this field is currently suspended. Cumulative production from the field is 126.4 BCFG and 970.9 MBC.

To date, the fields have "grown together" and field designations overlap. Wells in the fields produce from the same correlative interval which is the Cotton Valley Formation and should be consolidated. Valence is proposing to drill additional horizontal wells and requests horizontal rules in order to promote the efficient and effective development of the remaining hydrocarbons. The proposed 330'-660' well spacing with horizontal spacing

based on take points with no minimum between well spacing requirement from take points in a horizontal drainhole well to any vertical well will allow for future development in the Beckville (Cotton Valley) Field. The proposed rule specifies that, for purposes of lease line and between-well spacing, the nearest "take point" in a horizontal well be used. This take-point could be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased well.

The proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 330 feet to a lease line, as long as no take-point is closer than 330 feet to any lease line. Horizontal drainhole length on a lease is then maximized, resulting in the additional recovery of gas reserves. For purposes of assignment of additional acreage pursuant to Rule 86, it is proposed that the distance between the first and last take-point in a horizontal well be used. The proposed horizontal rules are consistent with those adopted previously by the Commission for other Cotton Valley fields in the area including the Beckville, North (Cotton Valley) Field.

Valence requests that the Field Rules for the subject field provide for off-lease penetration points. Statewide Rule 86 requires that the penetration point of a horizontal drainhole be on the lease. In some cases, it is beneficial to penetrate the reservoir off lease, while still having "take points" no closer to lease lines than allowed under Field Rule 2. Similar rules allowing offsite penetration points have been adopted in other Cotton Valley fields, after notice to the mineral owners of the off-lease tract on which the penetration point is to be located.

In order to provide consistency across all of the fields proposed for consolidation, Valence requests 640 acre gas units with optional 20 acre density. The allocation formula is currently suspended and Valence requests that the allocation formula remain suspended.

#### **FINDINGS OF FACT**

1. Notice of this hearing was sent to all operators in the subject fields at least ten (10) days prior to the subject hearing.
2. The Beckville, North (Cotton Valley) Field was discovered in June 1977 at a depth of 9,200 feet.
  - a. The field is a non-associated gas field with 22 producing wells carried on the proration schedule.
  - b. Field Rules provide for 467'-933' well spacing with take points and off lease penetration points in horizontal wells, 640 acre gas units with optional 40 acre density and allocation based on 25% acres and 75% deliverability.

- c. The allocation formula is currently suspended.
- 3. The Beckville, West (Cotton Valley) Field was discovered in May 1976 at a depth of 10,000 feet.
  - a. The field is a non-associated gas field with 51 producing wells carried on the proration schedule.
  - b. Field Rules provide for 467'-1,200' well spacing, 640 acre gas units with optional 40 acre density and allocation based on 100% acres.
  - c. The allocation formula is currently suspended.
- 4. The Darco S.E. Cotton Valley Field was discovered in June 1979 at a depth of 10,100 feet.
  - a. The field is a non-associated gas field with 64 producing wells carried on the proration schedule.
  - b. Field Rules provide for 467'-933' well spacing, 640 acre gas units with optional 40 acre density and allocation based on 100% acres.
  - c. The allocation formula is currently suspended.
- 5. The Beckville (Cotton Valley) Field was discovered in July 1974 at a depth of 9,300 feet.
  - a. The field is a non-associated gas field with 267 producing wells carried on the proration schedule.
  - b. Field Rules provide for 330'-660' well spacing, 40 acre gas units with optional 20 acre density and allocation based on 25% per well and 75% deliverability.
  - c. The allocation formula is currently suspended.
- 6. To date, the fields have "grown together" and field designations overlap. Wells in the fields produce from the same correlative interval which is the Cotton Valley Formation and should be consolidated.
- 7. In order to provide consistency across all of the fields proposed for consolidation, the proposed 640 acre gas units with optional 20 acre density is appropriate.

8. A spacing rule which utilizes "take-points" in a horizontal well for determination of distances to lease lines and between wells on the same lease will prevent waste and will not harm correlative rights.
  - a. The Cotton Valley is a tight formation and is not commercially productive unless fracture-stimulated.
  - b. A take-point in a horizontal well in this field may be a perforation, if a horizontal well is cased and cemented, an external casing packer in a cased well, or any open-hole section in an uncased portion of the wellbore.
  - c. Adoption of the proposed rule would allow operators to drill horizontal wells with penetration points, as defined by Rule 86, at distances closer than 330 feet to a lease line, as long as no take-point is closer than 330 feet to any lease line.
  - d. Adoption of the proposed rule will allow the horizontal drainhole length on a lease to be maximized.
9. Allowing off-lease penetration points, after notice to mineral owners of the offsite tract, will result in maximum producing drainhole length, thereby increasing ultimate recovery from horizontal drainhole wells.
10. For purposes of assignment of additional acreage pursuant to Rule 86, the distance between the first and last take-point in a horizontal well should be used.
11. Continuation of the administrative suspension of the allocation formula for the field is appropriate as there is a 100% market demand for gas in the field.

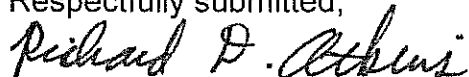
#### **CONCLUSIONS OF LAW**

1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
3. Consolidation of the fields and amending Field Rule Nos. 2 and 3 will prevent waste, foster conservation, protect correlative rights and provide for the orderly development of the Beckville (Cotton Valley) Field.

**EXAMINER'S RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends approval of the proposed field consolidation, amending Field Rule Nos. 2 and 3 for the Beckville (Cotton Valley) Field and the continued suspension of the allocation formula.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard D. Atkins". The signature is written in a cursive, flowing style.

Richard D. Atkins, P.E.

Technical Hearings Examiner